



ATTORNEY DOCKET NO. 14014.0383U3  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	)	
	)	
Chertov <i>et al.</i>	)	Art Unit: Unassigned
	)	
Application No. 10/619,715	)	Examiner: Unassigned
	)	
Filing Date: July 14, 2003	)	Confirmation No. Unassigned
	)	
For: LL-37 IS AN IMMUNOSTIMULANT	)	

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NEEDLE & ROSENBERG, P.C.  
Customer Number 36339

Sir:

Pursuant to the requirements of 37 C.F.R. § 1.56, submitted herewith on the accompanying Form PTO-1449 is a listing of documents known to Applicants and/or their attorneys. The documents cited with an asterisk (\*) were cited by or submitted to the Patent Office in U.S. Application No. 09/960,876, filed September 21, 2001, to which the present application claims priority. Pursuant to 37 C.F.R. § 1.98(d), copies of these documents are not enclosed.

Pursuant to 1273 OG 1, because the above-identified application was filed after June 30, 2003, copies of each cited U.S. patent and/or U.S. patent application publication listed on the accompanying Form PTO-1449 are not enclosed.

This Information Disclosure Statement is believed to be filed in a timely manner pursuant to 37 C.F.R. § 1.97(b)(1)(3), in that this Information Disclosure Statement is being filed within

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**Application No. 10/619,715**

three months of the filing date of the present patent application and that a first Office Action on the merits in the present patent application has not yet been mailed to Applicants.

Consideration of the cited documents and making the same of record in the prosecution of the above-referenced application are respectfully requested.

No fee is believed to be due; however, the Commissioner is hereby authorized to charge any fees which may be required or to credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

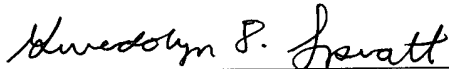


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**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.



Gwendolyn D. Spratt

9-30-03

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Form PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 7-80) PATENT AND TRADEMARK OFFICE  <b>LIST OF PRIOR ART CITED BY APPLICANT</b> (Use several sheets if necessary)	ATTORNEY DOCKET NO.: 14014.0383U3	SERIAL NO. 10/619,715
	APPLICANT: Chertov et al.	
	FILING DATE: July 14, 2003	GROUP: Unassigned

**U.S. PATENT DOCUMENTS**

EXAMINER INITIALS		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	*A1	3,610,795	10/05/71	Antoine et al.			
	A2	5,837,247	11/17/98	Chertov et al.			

**OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

	*A3	Agerberth et al. Fall-39, a putative human peptide antibiotic, is cysteine-free and expressed in bone marrow and testis. <i>Proc. Natl. Sci. Acad. USA</i> 92:195-199 (January 1995)
	*A4	Ahuja et al. The CXC chemokines growth-regulated oncogene (GRO) $\alpha$ , GRO $\beta$ , GRO $\gamma$ , neutrophil-activating peptide-2, and epithelial cell-derived neutrophil-activating peptide-78 are potent agonists for the type B, but not type A, human interleukin-8 receptor. <i>J. Biol. Chem.</i> 271(34):20545-20550 (1996)
	*A5	Bals et al. Augmentation of Innate Host Defense by Expression of a Cathelicidin Antimicrobial Peptide. <i>Infect. Immun.</i> 67:6084-6089 (1999)
	*A6	Bals et al. The peptide antibiotic LL-37/hCAP-18 is expressed in epithelia of the human lung where it has broad antimicrobial activity at the airway surface. <i>Proc. Natl. Acad. Sci. USA</i> . 95:9541-9546 (August 1998)
	*A7	Bals et al. Transfer of a cathelicidin peptide antibiotic gene restores bacterial killing in a cystic fibrosis xenograft model. <i>J. Clin. Invest.</i> 103(8):1113-1117 (April 1999)
	A8	Biragyn et al. Genetic fusion of chemokines to a self tumor antigen induces protective, T-cell dependent antitumor immunity. <i>Nat Biotechnol.</i> 17(3):253-258 (1999)
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	*A10	Chertov et al. Identification of defensin-1, defensin-2, and CAP37/azurocidin as T-cell chemoattractant proteins released from interleukin-8-stimulated neutrophils. <i>J. Biol. Chem.</i> 271(6):2935-2940 (February 9, 1996)
	*A11	Cowland et al. hCAP-18, a cathelin/pro-bactenecin-like protein of human neutrophil specific granules. <i>FEBS Lett.</i> 368:173-176 (1995)
	*A12	Fiore et al. Identification of a human cDNA encoding a functional high affinity lipoxin A4 receptor. <i>J. Exp. Med.</i> 180:253-260 (July, 1994)
	*A13	Foxman et al. Multi step navigation and the combinatorial control of leukocyte chemotaxis. <i>J. Cell Biol.</i> 139(5):1349-1360 (December 1997)
	*A14	Frohm et al. The expression of the gene coding for the antibacterial peptide LL-37 is induced in human keratinocytes during inflammatory disorders. <i>J. Biol. Chem.</i> 272(24):15258-15263 (June 13, 1997)
	*A15	Gudmundsson et al. The human gene FALL-39 and processing of the cathelin precursor to the antibacterial peptide LL-37 in granulocytes. <i>Eur. J. Biochem.</i> 238:325-332 (1996)
	*A16	Huang et al. Chemoattractant properties of PR-39, a neutrophil antibacterial peptide. <i>J. Leukoc. Biol.</i> 61:624-629 (May 1997)
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		Larrick et al. Human CAP18: a novel antimicrobial lipopolysaccharide-binding protein. <i>Infect. and Immun.</i> 63(4):1291-1297 (April 1995)
	*A19	Le et al. Utilization of two seven-transmembrane, G protein-coupled receptors, formyl peptide receptor-like 1 and formyl peptide receptor, by the synthetic hexapeptide WKYMVm for human phagocyte activation. <i>J. Immunol.</i> 163:6777-6784 (1999)
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	*A24	Neote et al. Molecular cloning, functional expression, and signaling characteristics of a C-C chemokine receptor. <i>Cell.</i> 72:415-425 (February 12, 1993)
	*A25	Nilsson et al. The human cationic antimicrobial protein (hCAP18), a peptide antibiotic, is widely expressed in human squamous epithelia and colocalizes with interleukin-6. <i>Infect. and Immun.</i> 67(5):2561-2566 (May 1999)
	*A26	Rosenberg. A new era for cancer immunotherapy based on the genes that encode cancer antigens. <i>Immunity</i> 10:281-287 (March 1999)
	*A27	Sozzani et al. The role of chemokines in the regulation of dendritic cell trafficking. <i>J. Leukoc. Biol.</i> 66:1-9 (July 1999)
	*A28	Su et al. A seven-transmembrane, G protein-coupled receptor, FPRL1, mediates the chemotactic activity of serum amyloid A for human phagocytic cells. <i>J. Exp. Med.</i> 189(2):395-402 (January 18, 1999)
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	*A30	Van Noort et al. Cell Biology of Autoimmune Diseases. <i>Int. Rev. Cytol.</i> 178:127-205 (1998)
	A31	Xin et al. Immunization of RANTES Expression Plasmid with a DNA Vaccine Enhances HIV-1-Specific Immunity. <i>Clin. Immunol.</i> 92(1):90-96 (1999)
	*A32	Yang et al. Differential Regulation of Responsiveness to fMLP and C5a Upon dendritic Cell Maturation: Correlation with Receptor Expression. <i>J. Immunol.</i> 165:2694-2702 (2000)
	*A33	Yang et al. Cutting Edge: Immature dendritic cells generated from monocytes in the presence of TGF- $\beta$ 1 express functional C-C chemokine receptor 6. <i>J. Immunol.</i> 163:1737-1741 (1999)
	*A34	Yang et al. Human neutrophil defensins selectively chemoattract naive T and immature dendritic cells. <i>J. Leukoc. Biol.</i> 68:9-14 (2000)
	A35	Yang et al. Fully human anti-interleukin-8 monoclonal antibodies: potential therapeutics for the treatment of inflammatory disease states. <i>J. Leukoc. Biol.</i> 66:401-410 (1999)
	*A36	Yang et al. $\beta$ -Defensins: Linking Innate and Adaptive Immunity Through Dendritic and T Cell CCR6. <i>Science</i> 286:525-528 (October 15, 1999)
	*A37	Zanetti et al. Cathelicidins: a novel protein family with a common proregion and a variable C-terminal antimicrobial domain. <i>FEBS Lett.</i> 374:1-5 (1995)
	*A38	Zlotnik et al. Recent advances in chemokines and chemokine receptors. <i>Crit. Rev. Immunol.</i> 19:1-47 (1999)

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.